

AMENDMENTS TO THE CLAIMS

This listing of claims replaces all prior versions and listings of claims in the application:

Listing of Claims

1.-44. (Canceled)

45. (New) An information rate control processor for controlling a communication rate for transmission of information in a telecommunication system having a core network and a plurality of access nodes in communication with the core network, the information rate control processor comprising:

a first sub-processor adapted to determine a plurality of maximum information transmission rates along a path of communication established between a plurality of access nodes;

a second sub-processor adapted to select a lowest one of the plurality of maximum information transmission rates; and

a third sub-processor adapted to authorize or establish a communication rate no greater than the selected lowest rate.

46. (New) The information rate control processor of claim 45, adapted to dynamically authorize or establish the communication rate during a communication session.

47. (New) The information rate control processor of claim 45, adapted to authorize or establish the communication rate at the set up of a communication session.

48. (New) The information rate control processor of claim 45, adapted to authorize or establish the communication rate prior to the set up of a communication session.

49. (New) The information rate control processor of claim 45, adapted to be located at an access node of a telecommunication system.

50. (New) The information rate control processor of claim 45, adapted to be located at a core network.

51. (New) The information rate control processor of claim 50, wherein the information rate control processor operates in a service specific convergence sublayer of an AAL2 adaptation layer in the core network.

52. (New) The information rate control processor of claim 50, adapted to operate in a real time transport protocol (RTP) transport layer in the core network.

53. (New) The information rate control processor of claim 52, adapted to operate in an RTP transport layer in an asynchronous transfer mode (ATM) network.

54. (New) A communication system, comprising:
a core network;
a plurality of access nodes each in communication with the core network;
a plurality of endpoints; and
an information rate control processor adapted to control a communication rate for transmission of information in the communication system among endpoints.

55. (New) The communication system of claim 54, wherein the core network comprises an asynchronous transfer mode (ATM) network.

56. (New) The communication system of claim 55, wherein the ATM network includes an AAL2 adaptation layer.

57. (New) The communication system of claim 56, wherein the AAL2 adaptation layer includes a 1.366.2 Service Specific Convergence Sublayer.

58. (New) The communication system of claim 54, wherein the core network is an IP network.

59. (New) The communication system of claim 58, wherein the IP network includes a real time transport protocol (RTP) transport layer.

60. (New) The communication system of claim 54, further comprising at least two access nodes communicating between the endpoints, wherein the path of communication includes endpoint to endpoint communication.

61. (New) The communication system of claim 60, further comprising an interface between each access node and its respective endpoint.

62. (New) The communication system of claim 61, wherein at least one interface has a variable maximum information transmission rate.

63. (New) The communication system of claim 62, wherein the at least one interface is an air interface.

64. (New) The communication system of claim 54, wherein at least one of the access nodes is located in a radio access network.

65. (New) The communication system of claim 64, wherein the radio access network is one selected from the group consisting of a second generation cellular access network and a third generation cellular access network.

66. (New) The communication system of claim 65, wherein at least one of the access nodes is a radio network controller in a UMTS access network

67. (New) The communication system of claim 60, wherein at least one endpoint is located in a public land mobile network (PLMN).

68. (New) The communication system of claim 67, wherein at least one of the endpoints is a wireless mobile terminal.

69. (New) The communication system of claim 67, wherein the core network includes a universal mobile telecommunication system (UMTS) mobile switching center (UMSC) for mapping messages into an lu framing protocol for transport in the UMTS access network.

70. (New) The communication system of claim 54, wherein at least one of the access nodes is located in a fixed access network.

71. (New) The communication system of claim 70, wherein the fixed access network is one selected from the group of a public switched telephone network (PSTN), an integrated services digital network (ISDN), and an PSTN/ISDN access network.

72. (New) The communication system of claim 71, wherein at least one of the endpoints is a fixed network terminal.

73. (New) The communication system of claim 72, wherein at least one of the access nodes is a transcoder forming part of the fixed access network.

74. (New) An information rate control function means for controlling a communication rate for transmission of information in a telecommunication system comprising:

a determining means adapted to determine a plurality of maximum information transmission rates along a path of communication established between a plurality of access nodes;

a selection means adapted to select a lowest one of the plurality of maximum information transmission rates; and

an authorizing or establishment means adapted to authorize or establish a communication rate no greater than the selected lowest rate.

75. (New) The information rate control function means of claim 74, adapted to communicate the plurality of maximum information transmission rates across a core network as messages within 1.366.2 Type 3 cells of an ATM AAL2 protocol.

76. (New) The information rate control function means of claim 74, adapted to communicate the plurality of maximum information transmission rates across a core network as messages within RTP packets of an IP protocol.

77. (New) A telecommunications system, comprising:
at least one access network connected to a core network;
at least a first and second endpoint in communication with each other via the at least one access network across the core network;
at least a first and second telecommunication node adapted to set information transmission to and from the first and second endpoint; and
at least a first and second interface, the at least first and second endpoints communicating with the at least one access network across the first and second interfaces, at least one of the interfaces having a variable maximum information transmission rate.

78. (New) The telecommunications system of claim 77, wherein the first and second telecommunications nodes respectively are adapted to signal to a remote node the maximum information transmission rate supportable by the first and second interfaces, the remote node adapted to compare the maximum information transmission rates that can be supported by the first and second interfaces, and wherein the first and second telecommunications nodes respectively are adapted to set the information

transmission rate to and from the first and second endpoints to not exceed that of the lower of the maximum information transmission rates.

79. (New) A telecommunications system comprising:
a core network;
a plurality of access networks connected to the core network,
a first and second endpoint, the first and second endpoints communicating with each other via the access networks across the core network;
a first and second telecommunications node, information transmission to and from the first and second endpoints being respectively set by the first and second telecommunications nodes; and
a first and second interface, the first and second endpoints communicating with one of the access networks respectively across the first and second interfaces, at least one of the interfaces having a variable maximum information transmission rate.

80. (New) The communications system of claim 79, wherein the first telecommunications node is adapted to signal to a remote node the maximum information transmission rate supportable by the first interface, the remote node acting to compare the maximum information transmission rates that can be supported by the first and second air interfaces, and wherein the second telecommunications node is adapted to set the information transmission rate of the second endpoint to not exceed that of the lower of the maximum information transmission rates.

81. (New) A method for controlling a communication rate for transmission of information in a telecommunication system having a core network and a plurality of access nodes in communication with the core network, comprising the steps of:
determining a plurality of maximum information transmission rates along a path of communication established between a plurality of access nodes;
selecting a lowest one of the plurality of maximum information transmission rates;
and

authorizing or establishing a communication rate no greater than the selected lowest rate.

82. (New) The method of claim 81, wherein the communication rate is dynamically authorized or established during a communication session.

83. (New) The method of claim 81, wherein the communication rate is authorized or established at the set up of a communication session.

84. (New) The method of claim 81, wherein the communication rate is authorized or established prior to the set up of a communication session.

85. (New) The method of claim 81, further including the step of communicating the plurality of maximum information transmission rates across the core network as messages within 1.366.2 Type 3 cells of an ATM AAL2 protocol.

86. (New) The method of claim 81, further including the step of communicating the plurality of maximum information transmission rates across the core network as messages within RTP packets of an IP protocol.

87. (New) A method for controlling the rate of information transmission between first and second endpoints which communicate with each other via access networks separated by a core network, information transmission to and from the first and second endpoints being respectively set by first and second telecommunications nodes, the first and second endpoints communicating with one of the access networks respectively across first and second interfaces, at least one of the interfaces having a variable maximum information transmission rate, the method including the steps of:

signally by the first and second telecommunications nodes respectively to a remote node the maximum information transmission rate supportable by the first and second interfaces;

comparing the maximum information transmission rates supportable by the first and second air interfaces; and

setting the information transmission rate of each endpoint to not exceed that of the lower of the maximum information transmission rates.

88. (New) The method of claim 87, wherein the remote node signaled by each of the first and second telecommunications nodes is the other of the first and second telecommunications nodes.

89. (New) The method of claim 87, wherein the comparing of the maximum information transmission rates supportable by the first and second air interfaces is performed in each of the first and second telecommunications nodes.

90. (New) The method of claim 87, wherein the setting of the information transmission rate of each endpoint to not exceed that of the lower of the maximum information transmission rates further comprises setting the rate of operation of a codec to the lower of the maximum information transmission rates.